CLAIM AMENDMENTS

Please add claim 23 and cancel claim 9, and amend claim 10 as follows:

1. (Previously Amended) A method, comprising:

automatically providing a plurality of color values as input to an image processing device, wherein said image processing device is under a control of a particular dimensional order;

dynamically determining which color value among said plurality of color values has attained a gamut limit;

transforming said particular dimensional order of said color which was determined to have attained said gamut limit, in response to dynamically determining which color value among said plurality of color values has attained gamut limit; and

thereafter automatically reducing said particular dimensional order through use of a dedicated gamut mapping function utilized to determine surface points and axes, thereby allowing for an improved estimate of said color based on said reduced dimensional order, thereby providing improved control for colors that are located external to said gamut and maintaining said color's hue.

2. (Previously Amended) The method of claim 1

wherein a color sensor is used in dynamically determining which color value among said plurality of color values has attained a gamut limit.

3. (Previously Amended) The method of claim 1 wherein said particular dimensional order comprises a three-dimensional order represented by the colors cyan, magenta, and yellow.

4. (Previously Amended) The method of claim 3 wherein reducing said particular dimensional order, further comprises:

reducing said three-dimensional order to a two-dimensional order.

5. (Previously Amended) The method of claim 3 wherein reducing said particular dimensional order, further comprises:

reducing said three-dimensional order to a one-dimensional order.

6. (Previously Amended) The method of claim 1 wherein a ray-based approach consisting of a ray being drawn from a desired color to a point on a neutral axis through said gamut limit is used to perform said gamut mapping

7. (Previously Amended) The method of claim 6 wherein said color sensor comprises an offline sensor.

8. (Previously Amended) The method of claim 6 wherein said color sensor comprises an inline sensor.

9. (Cancelled)

10. (Currently Amended) A system, comprising:

a plurality of color values automatically provided as input to an image processing device, wherein said image processing device is under a control of a particular dimensional order;

a color sensor for dynamically determining which color value among said plurality of color values has attained a gamut limit;

an iterative controller; ~~and~~

a transformation module provided within said iterative controller for automatically reducing said particular dimensional order based on determining which color value among said plurality of color values has attained said gamut limit; and

an adder module for adding feedback obtained through said transformation module, thereby providing improved control for colors that are located external to said gamut.

11. (Original) The system of claim 10 wherein said transformation module further comprises a transformation module for transforming said particular dimensional order, in response to dynamically determining which color value among said plurality of color values has attained gamut limit.

12. (Original) The system of claim 10 wherein said particular dimensional order comprises a three-dimensional order.

13. (Previously Amended) The system of claim 12 wherein said transformation module further comprises a compensation module for reducing said three-dimensional order to a two-dimensional order using a standard International Color Consortium (ICC) framework.

14. (Previously Amended) The system of claim 13 wherein said compensation module reduces said three-dimensional order to said two-dimensional order in response to determining which colors among said plurality of colors have attained said gamut limit.

15. (Original) The system of claim 12 wherein said transformation module further comprises a transformation module for reducing said three-dimensional order to a one-dimensional order.

16. (Previously Amended) The system of claim 15 wherein said transformation module reduces said three-dimensional order to said one-dimensional order in response to determining which color among said plurality of colors has attained said gamut limit.

17. (Previously Amended) The system of claim 10 wherein said color sensor comprises an offline sensor.

18. (Previously Amended) The system of claim 10 wherein said color

sensor comprises an inline sensor.

19. (Previously Amended) The system of claim 10 further comprising a color rendering device associated with said transformation module and wherein said transformation module is integrated with said image processing device.

20. (Previously Amended) The system of claim 10 wherein said iterative controller's iterative output is input to said color rendering device, such that said iterative output of said iterative controller reflects a plurality of compensated color values requiring correction for rendering variations thereof.

21. (Previously Amended) The system of claim 18 wherein said color rendering device comprises a printer.

22. (Previously Amended) The system of claim 18 wherein said color rendering device comprise a photocopy machine.

23. (New) A method, comprising:

automatically providing a plurality of desired L*a*b* memory color values as input to a transformation module;

transforming said L*a*b* memory color values into NDC memory color values using a transformation function;

providing said NCD memory color values to an adder;

providing the output from said adder as input to an iterative controller which outputs compensated CMY color values;

providing said compensated CMY color values as input to a graphical rendering device;

printing patches of said compensated CMY color values;

providing said patches as input to a color sensor;

generating measured L*a*b* values for said patches;

providing said measured L*a*b* values as input to a second transformation module which transforms said L*a*b* values into NCD values and provides said NCD values to said adder, thereby completing a feedback loop which minimizes the error between the measured color and the desired L*a*b* memory color providing improved control for colors that are located external to said gamut.